

### Amendments to the Claims

Claims 1-25. (cancelled)

26. (new) A polymer of gluten comprising gluten proteins, wherein said gluten proteins are intermolecularly covalently linked through polythiol-containing molecules.

27. (new) The polymer as in claim 26, which is prepared by mixing said gluten proteins together with polythiol-containing molecules.

28. (new) The polymer of claim 26, which has a strength higher than 30 MPa.

29. (new) A process for preparing a polymer of gluten comprising gluten proteins comprises the step of mixing gluten proteins in a gluten-dispersing mixture with polythiol-containing molecules.

30. (new) The process of claim 29, wherein said gluten-dispersing mixture is an aqueous environment.

31. (new) The process of claim 29, comprising the step of isolating said gluten polymer by precipitation and subsequent centrifugation.

32. (new) The process of claim 29, comprising the step of drying the mixture.

33. (new) The process of claim 29, comprising the step of first leaving the dried mixture unhandled for a certain period and than compression-molding the mixture.

34. (new) The process of claim 33, wherein said period is at least 7 days.

35. (new) The process of claim 34, wherein said period is at least 30 days.

36. (new) The process of claim 29, comprising mixing fibers.

37. (new) A process for preparing a gluten based polymer comprising the steps of mixing gluten in a gluten-dispersing mixture together with polythiol-containing molecules, drying the precipitate, leaving the dried material unhandled for a certain time period and compression-molding the precipitate or a selection or combination hereof.

38. (new) A process of claim 37 which comprises a step of precipitating the reaction products out of the mixture obtained by mixing gluten in a gluten-dispersing mixture together with polythiol-containing molecules and thereafter the step of centrifuging the mixture before drying the precipitate.

39. (new) The process of claim 37, wherein gluten are also mixed with fibers in the first step.

40. (new) A composite material, comprising fibers and a gluten polymer according to claim 26.

41. (new) A process for preparing a composite material of claim 40, wherein the process comprises the steps of pre-coating said fiber with the gluten polymer of claim 26 and then contacting the pre-coated fibers with a gluten-dispersing mixture.

42. (new) The process of claim 41, comprising a final step of drying the resulting material, leaving the material unhandled for a certain period and than compression-molding the material.

43. (new) A process for preparing a gluten-fiber composite material, comprising the steps of mixing gluten and fiber in a gluten-dispersing mixture, drying the mixture, leave the dried mixture unhandled for at least 30 days and compression-mold the dried mixture.

44. (new) A process for preparing a gluten-fiber composite material, comprising the steps of pre-coating the fiber with the gluten polymer under dry circumstances and then contacting the pre-coated fibers with a gluten-dispersing mixture.

45. (new) A process as in claim 44, wherein one, two or all of the following steps are performed:

- a) drying the gluten-coated fibers;
- b) leaving the gluten coated fibers unhandled for a certain period; and
- c) compression-molding the material.

46. (new) A composite material prepared by the process of claim 44.

47. (new) Gluten which is compression-molded after it is left unhandled for a certain period.